

Application of nanostructured coatings by plasma spraying

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Abstract

© 2018 Institute of Physics Publishing. All rights reserved. Nanostructured coatings demonstrate lower porousness by an order of magnitude, a far higher tenacity to wear, corrosion and erosion. The article presents the investigations of new method of nanostructured coatings application consisting in plasma spraying of material supplied into plasma jet and nanoparticles in suspension or solution followed by coating surface melting by air plasma jet.

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Keywords

additive, carbides, coating, microstructure, nanoparticles, oxides, plasma, plasma jet, substrate, wear, wear resistance

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